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ABSTRACT

This document is the fourth in a series of 12 early childhood program descriptions compiled by the Far West Laboratory for Educational Research and Development. The program described here is the Responsive Program developed by Glen Nimnicht at the Far West Lab i Berkeley, California. The Responsive Model is a preschool through third grade program designed to respond to the needs and interests of children. Children are free to explore activities, work at their own pace, and make discoveries under the guidence of the teaching staff. Toys and materials used in the model have self-correcting features so that the child will know immediately the consequences of his actions. Numerous evaluation studies have been conducted to measure the effectiveness of the model. Included in the program description are brief outlines of: (1) goals and objectives, (2) content and materials, (3) classroom activities, (4) parent involvement, (5) professional and paraprofessional training, (6) administrative requirements and costs, (7) program development and evaluation, and (8) program history and present (1971) status. (JMB)

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Early Childhood
Information Unit
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Program Report

RESPONSIVE PROGRAM

Project Director: Glen Nimnicht

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SUMMARY

The Responsive Model, a preschool through third grade program, is based on the assumption that the development of intellectual abilities and a positive self-image are essential in preparing children for success in school and later in life.

To achieve these objectives, the developer of the model, Glen Nimnicht, at the Far West Laboratory for Educational Research and Development, designed a learning environment that *responds* to the needs and interests of children. Activities in the Responsive Model are undertaken for their own rewards. Children are free to explore activities, work at their own pace and make discoveries under the guidance of the teaching staff. In addition, children are informed immediately of the consequences of their actions. For example, toys and materials used in the model have self-correcting features so that the child will know immediately whether he is right or wrong.

The classroom is equipped with a large variety of "responsive" toys and materials. A list of recommended and optional materials is provided by the developer.

Numerous evaluation studies have been conducted to measure the effectiveness of the model. Some of these studies were conducted by independent school districts using the Responsive Model. Others were conducted by the developer to measure the effectiveness of various aspects of the program. The aggregate of these studies tends to show significant differences on measures of intelligence, achievement and self-concept.

GOALS AND OBJECTIVES

For whom is the program designed?

The Responsive Program was originally designed for three- to nine-year-old children from low-income homes and ethnically different backgrounds. However, the developers also believe their general model can be used with most children from three to nine regardless of background and ability.

What are the goals and objectives of the program?

The objectives of the program are to promote the development of intellectual abilities and of a healthy self-concept. Development in these areas is seen as interdependent, contributing to the welfare of the total child. These goals are broken down into more specific objectives under the section titled, "Content and Materials."

What is the rationale for the program emphasis and design?

The developers maintain that the educational needs of a large number of children, especially those from low-income homes and ethnically different backgrounds, are not met by schools that operate around the concept that all children at a certain age ought to learn the same things and are motivated by the same factors. The developers feel that children learn at different rates, in different ways and, above all, they learn best when they are interested. The school environment should make provisions for these differences and be responsive to the needs of individual children. This is the approach taken by the developers. (See discussion of the approach of the Responsive Program under Classroom Activities.)

CONTENT AND MATERIALS

How is the program designed to be used?

The final model of the program is designed to be used as a complete nine-month curriculum for children from ages three to nine. The program has several parts: a preschool (Head Start) component, a primary school (Follow Through) component, a Parent/Child Toy Lending Library, and a day care component. At the time of this writing, the preschool and Toy Library components are available for dissemination, and the primary school component is being field tested.

The program is a complete curriculum in the sense that it provides guidelines for planning activities for the entire school day and that it encompasses multiple subject area treatment rather than a single subject area treatment.

What skills, concepts, and attitudes are to be learned?

The skills, concepts, and attitudes to be learned are organized around the two major objectives of the program, the development of a healthy self-concept and of basic intellectual abilities. For example, in order for the child to develop a healthy self-concept he needs to develop a number of positive attitudes and values. These include:

a liking for himself and his people;
a belief that what he thinks, says, and does makes a difference;
a belief that he can be successful in school;
a belief that he can solve a variety of problems;
a realistic estimate of his own abilities and limitations;
and feelings of pleasure and enjoyment.

In the area of intellectual development, achievement in the following areas is specified in the context of problem solving.

1. Sensory and perceptual development:
   a. discrimination and interpretation of sensory experiences
   b. coordination of multiple senses

2. Language development:
   a. naming objects and experiences
   b. developing sentence structure formation

3. Concept formation:
   a. relational concepts
   b. classification concepts

The developers feel that problem solving is the essence of learning. A child who is developing the ability to solve problems (physical, interactional, and affective) is learning how to learn. Accordingly, the program emphasizes the development of various problem solving skills and strategies. A few examples of these include:

1. reasoning inductively (discovering rules from examples)

2. reasoning deductively (applying general rules to specific situations)

3. eliminating what is known to discover something previously unknown

4. hypothesizing (conceptualizing probable responses to alternative actions)

The development of both a healthy self-concept and intellectual abilities is important for problem solving. In many cases, a person will not be able to overcome the affective (emotional) aspects of problems unless he has a healthy self-concept.

How is the curriculum organized?

Instructional units, called learning episodes, are organized to achieve objectives developed in each of the areas described above. For each objective there are a number of learning episodes. The learning episodes make use of specific toys, games, or pieces of equipment. For an example of a learning episode, see the typical lesson under Classroom Activities.

These episodes are arranged in varying degrees of difficulty and complexity. Learning processes are presented in the order of free exploration, matching, memory, discrimination and production. (See teaching-learning strategy under Classroom Activities for detailed examples. However, the developers make it clear that not every child must follow the suggested sequence, nor must he cover every episode. The reason for this

flexibility is that children learn differently and follow different sequences of learning. The developers say:

> In many instances we do not claim to know how the learning of a particular behavior contributes to the future learning ability or achievement of a child. This has sometimes been described as a "sandpile theory of learning"; that is, we know that it takes a tremendous number of grains of sand to support more sand. But we are not at all certain which grain of sand is necessary to support the next one. And, as the analogy implies, we are not certain that any particular grain is necessary--others could be substituted and still support the pile.

Implementing this flexibility is a matter for each teacher's judgment, since only the above guidelines are given. Once teachers are familiar with the objectives of the program and the approach used in the Responsive Program to achieve them, they are encouraged to supplement the existing episodes with ones of their own.

What student materials are provided or suggested?

Almost all of the student materials used in the learning episodes of the program are toys, games, records, blocks, etc., rather than printed materials like workbooks.

A series of eight basic toys, which are used in a number of learning episodes, may be obtained through General Learning Corporation. A second series of eight optional toys is also available. A list of toys is given under Professional and Paraprofessional Training. (The developers emphasize that the materials for children are used to best advantage when accompanied by the appropriate training for teachers, assistants, and/or parents.)

For the componenets other than the Toy Library, the developers suggest additional student materials. A few examples of these materials include hardwood unit blocks, rhythm instruments, a 3-speed record player, and balance boards. Most of the materials are common and can be purchased at retail outlets. A few items must be obtained from specialized manufacturers, such as the Language Master from Bell and Howell or the Instructa Sette from Biodynamics. Other materials, such as "dress-up" clothing for dramatic play and wood scraps for the carpentry table, can be made or obtained free.

The developers provide lists of "recommended" and "optional" materials and the sources from which they may

be obtained. They indicate that considerable flexibility can be used in gathering these materials. Many of the items can be improvised. Further, no one piece of material is considered absolutely necessary although it is essential that a great variety of materials be provided.

What materials are provided or suggested for the teacher?

The developers provide materials to help the teacher (or parent) organize the class and conduct classroom activities (or work with children at home). The materials include outlines of learning episodes, film clips, numerous background articles describing the procedures and approaches used in implementing the Responsive Program, and guides suggesting topics for classroom activities and weekly teacher workshops. (Although these materials make specific suggestions about classroom organization and activities, they emphasize the principle that teachers should be flexible in implementing the program, responding to the needs of the children in their classrooms.)

Materials used in the preschool and Toy Library programs are now published by General Learning Corporation, including a detailed notebook for inservice teacher training, a handbook in the use of toys for teacher assistants, a Toy Library manual for teacher-librarians, two handbooks in the use of toys for parents, two sets of toys, and several films. Other unpublished papers are used by the developers for inservice training of teachers participating in components still in the test stage.

For a list of materials available, see Professional and Paraprofessional Training.

What materials are provided or suggested for student testing?

In the research project, a pretest was given at the beginning of the year and a posttest at the end of the year. However, pre and posttesting is not a requirement. The following are the tests that were used with the age groups indicated:

Preschool:

1. Preschool Inventory (PSI): Developed by Bettye Caldwell and published by the Educational Testing Service. The PSI is a preschool achievement test.

2. Boehm Test of Basic Concepts: Developed by Ann E. Boehm and published by the Psychological Corporation. The Boehm Test measures children's mastery of concepts considered necessary for achievement in the first years of school.

Kindergarten:

1. The short form of the Wechsler Preschool and Primary Scale of Intelligence (WPPSI): published by the Psychological Corporation.

2. The Self-Concept Test: Currently under development by the program.

3. Raven's Progressive Matrices: Assessed logical reasoning, distributed by the Psychological Corporation.

First and Second Grade:

1. The Wechsler Intelligence Scale for children (WISC).

2. The Self-Concept Test: As above.

3. The Problem Solving Test: Currently under development by the program.

4. Raven's Progressive Matrices: As above.

Individual school districts may administer other standardized tests as part of their evaluation procedures. Results from these tests are often used by the program.

CLASSROOM ACTIVITIES

What is the teaching-learning strategy?

One of the key features of the program is the use of the principle of responsiveness to guide the selection of materials, games and activities used in the classroom. A learning environment that responds to children is defined by the developers as follows:

1. It permits the child to explore freely within limits.

A large portion of the daily time schedule is devoted to individual exploration of materials, toys, and games. The child is free to remain with an activity for as long as he wishes, leave it when he has lost interest or reject the activity at the outset. However, the materials that are available for exploration have been pre-selected by the teacher to foster the development of certain skills, concepts or attitudes. For example, during a certain week materials that foster the development of classification concepts may be on display and children are given the opportunity to select activities within this constraint. Other constraints of the environment include health, safety and respect for others' rights.

2. It is self-pacing.

Children may progress at their own pace. They may choose to repeat an activity or to look ahead. A variety of ways are available to reach the same objective.

3. It informs the child as soon as possible about the consequences of his actions.

While human beings are the most versatile and important source of feedback, many materials, toys and games are designed to ensure that they are self-correcting so knowledge of results may be immediate.

4. It encourages the child to make full use of his capacity for discovering concepts, and it guides him to make interrelated discoveries.

Trial and error learning is thought to produce more frustration than insight. Hints or prompts are given to guide the child to make discoveries on his own. The environment is structured so that the learner is likely to make a series of interconnected discoveries about the physical, cultural, or social world.

5. It stresses intrinsic motivation.

Activities are designed to be self-rewarding, or "autotelic," in that they do not depend on extrinsic rewards and punishments.

The approach of the Responsive Program is illustrated in the following description of the activities of the learning booth. The learning booth, which houses an electric typewriter with different color keys and a magnetic chalk board, is an optional piece of equipment recommended for use in kindergarten and first grade classes.

Several times a week, a booth attendant asks a particular child if he would like to "play with the typewriter." If the child says "yes," the attendant takes him to a booth in which he is allowed to play with the typewriter for ten minutes. The child is free to leave the booth, play an earlier phase than the one initiated by the attendant, or refuse the invitation to play with the typewriter. If the child refuses to play, the attendant does not ask again that day. However, if the child later asks to type, he may do so. The booth attendant responds to but does not initiate conversation.

There are five phases of typical booth activities. The phases are:

Phase I. Free exploration. The child is given as long as ten minutes to freely play with the typewriter. The booth assistant names the letters or symbols the child strikes: "a," "comma," "s," etc.

Phase II. Search and match. The booth attendant displays the magnetic chalk board with overlays of the chart showing the typewriter keys. He then selects a plastic letter, says the letter, and places it on the magnetic chalkboard over the colored circle corresponding to the color and placement of the letter on the typewriter. The child discovers for himself the rules of this new game which are that the child finds the letter on the typewriter and strikes it. When he has learned to match all of the letters and symbols, the child is ready for the next phase.

Phase III. Discrimination. There are four steps in this phase. The child first discriminates between two capital letters and types the correct one. In step two, the child learns about small (lower-case) letters. In step three, the child discovers the shift key and makes the association between capital and small letters. During the final, or fourth, step, the child searches for and finds the capital equivalent of small letters. At each step, the attendant allows the child to discover the new game.

Phase IV. Typing words and stories. The child at this point is ready to type words within his spoken

vocabulary. When he knows 15 to 20 words, he is ready to type his own story.

Phase V. Classroom-related activities. The child may then utilize the typewriter for classroom-related activities such as writing his teacher or his parents, and typing passages from a book he is reading.

Results of the learning booth activities are indicated in the Program Development and Evaluation section.

What classroom organization is best suited to this program?

The environment is arranged so that the child is likely to make discoveries about his physical, intellectual and social world. This arrangement is based on the notion that a child better remembers what he discovers for himself. Furthermore, the developers believe that problem-solving is the essence of learning and it is best learned in an environment that poses problems and encourages the discovery of their solutions. The following is an example of a daily time schedule for the preschool and kindergarten programs.

9:00 - 10:30 Free choice activities

As soon as the children arrive in school, they begin with free choice activities. The period is so designated because the children have the opportunity to explore whatever materials, toys and games are available on display. They may listen to records, play with blocks, puzzles, cuisenaire rods, etc., and work on them for the remainder of the period. These activities are selected to foster the development of certain skills, concepts or attitudes for that day, week, or month. with individual children or small groups of two or three, the teacher and assistant will carry out learning episodes built around a selected toy or game.

10:30 - 10:45 Snack Time

10:45 - 11:00 Group time

One or two group times are recommended each day. This period is devoted to large group activities like singing, listening to a story, show and tell, or participating in a learning episode which introduces a new game or toy. Group time usually lasts 10 to 15 minutes. Children may choose not to participate, but they must choose a quiet activity that does not disturb the group.

11:00 - 12:00 Outdoor play (when possible)

> The developers feel that outdoor play should be an extension of the classroom. Teachers are asked to use any opportunity to relate outdoor play to the instructional program and its objectives. For example, speaking in complete sentences to describe action, --"Gary is sliding down the board" or relational concepts --"Do you want the rope higher or lower?"

The above is an example of a half-day schedule; it can be converted to a full-day schedule by being repeated in the afternoon, perhaps with an optional rest period added. In the first and second grade programs, the same general schedule may be followed; however, the developers suggest more large group activities (group time) and more educational games and toys related to math, science and reading. Programs for these grades are still under development.

How are students evaluated?

The tests administered to students twice each year are described above under Content and Materials. As indicated above, some individual school districts administer other standardized tests as part of their own evaluation.

In addition, teachers are encouraged to observe and keep records on individual children. The purpose of these observations is to enable teachers to determine the learning styles, levels of ability in various areas, and life styles of the children so that they can respond to the needs of each child. The teacher training materials provided by the developers include suggested procedures and forms to use in observing children.

Other than observation guides, no classroom or intermediate tests are provided for the teachers to use during the year. However, since the Responsive Program places heavy emphasis upon the use of feedback and on toys and games that are self-corrective, the student frequently gets information about the correctness of his responses. See the Classroom Activities section for further information about the program.

What is a representative lesson?

The following is a learning episode titled "Numbers and Numerals" which appears under the objective of concept formation--classificational.

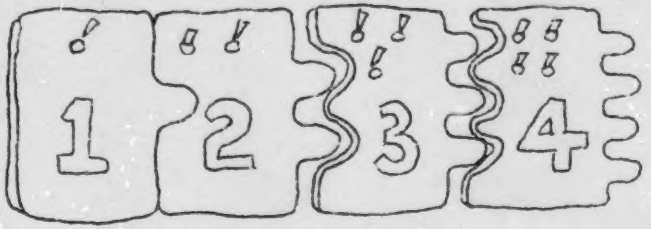
NUMBER PUZZLE

Objective:

When the child is given a puzzle piece with a numeral and number of holes corresponding to the numeral, the child will name the numeral.

Equipment: 1. Ten hardboard interlocking puzzle pieces, printed with the numerals 1 to 10, each with the appropriate number of holes for pegs

2. Pegs



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Procedure:

1. Place the puzzle pieces on a table with a box of pegs near by. Allow the children to explore the game.

2. The children will begin to put the pegs in the holes. As they put the pegs into the holes, help them to count them. Allow children to discover that the numberals represent the number of holes on each piece.

A variation of the game is to allow the child to put the puzzle together.

PARENT INVOLVEMENT

To what extent are parents involved?

The purposes of involving parents in the program are:

1. To support parents' efforts to help their child develop a healthy self-concept and further his intellectual abilities.

2. To aid parents in participating in the decision-making process that affects the education of their children.

3. To improve the quality of interaction between parents and the schools.

There are two separate programs involving parents. The first one to be described is used with parents of children who are attending the primary school (Follow Through) classes. The preschool program has left parent involvement as an option for local districts. Plans are being made to extend the parent involvement workshops to the preschool program.

The Follow Through parent involvement program has been operating under the guidance and sponsorship of the developers. Teachers and assistants conduct the program under the guidance of a Program Advisor, who acts as an intermediary between them and the developers. (Each Program Advisor provides training and advisory support for 10 teachers and 10 assistants.) The parent involvement program is focused around weekly or biweekly meetings with parents. These meetings are conducted by local teachers and assistants to accomplish the following:

1. To familiarize parents with the program,

2. To recommend ways parents can help develop a child's healthy self-concept and foster his intellectual growth,

3. To demonstrate the use of toys, games and other materials (including two learning episodes) that the parents can use with their children at home, and

4. To receive suggestions and recommendations from parents for improving the program.

For parents who do not attend these meetings, the developers recommend that each local Program Advisor organize parent volunteers to contact those parents and visit them at home to demonstrate materials for their use with their own children.

Parents may also be involved in the actual instructional program by attending the teacher training sessions and becoming classroom assistants or volunteers.

A separate parent involvement program, the Parent/Child Toy-Lending Library, has been devised for parents of 3- and 4-year-old children who wish to work one-to-one at home with their children. Parents meet once a week for eight weeks in a course run by a trained teacher-librarian. The course is centered around a series of eight basic toys, and each week the parents take home a new toy to use with their children. The Toy Library also contains a second series of eight toys. Each toy can be used in one or more learning episodes with specific objectives.

During each meeting of the course, parents are asked to:

1. practice a specific behavior that is related to some concept of physical or intellectual growth of young children;

2. observe a demonstration of a toy or a game that helps children learn a skill or concept;

3. role play with other adults to learn to use the toy or game;

4. take the game home and use it with their children;

5. discuss with the other parents some topic of interest related to the education of their children.

After the eight week session, parents continue to check out toys and games from the Toy Library to use at home with their children.

What materials are provided for training parents?

In the Toy Library program, two handbooks in the use of toys have been developed for parents. They are titled, "Parent Guide: How to Play Learning Games with a Preschool Child" and "Parent Guide: Learning Games

to Play with a Preschool Child (Second Series)." Each handbook is designed to be used with a series of eight toys; each contains approximately 20 learning episodes as well as general instructions and suggestions for specific language to be used with children. The developers have also produced a set of eight filmstrips and cassette tapes demonstrating the use of the first series of toys.

Parents are trained by a teacher-librarian who has been trained by the developers. A "Librarian Manual for the Parent/Child Toy-Lending Library" has been developed to help the teacher-librarian establish the library, conduct the course, and operate the library after the course.

The Librarian Manual, the filmstrips, the two Parent Guides, and the two sets of toys are now available from General Learning Corporation, Morristown, New Jersey.

Parent-training materials for the primary school component are being developed at the present time. These involve an additional Toy Library of eight toys for 5- and 6-year-old children, which is being tested with parents of Follow Through children at ten sites during the 1971-72 school year.

PROFESSIONAL AND PARAPROFESSIONAL TRAINING

What skills or knowledge do professionals require?

In order to implement the model effectively, the teacher needs to be familiar with the philosophy of the Responsive Program and the procedures used to implement the program in the classroom. She needs to be constantly aware of individual children's needs and interests by observing each child work through problem-solving tasks. She then selects a variety of appropriate activities and materials to correspond to these needs. She needs to assume a non-directive role, allowing the child to work through a problem and discover the solution for himself. She should demonstrate learning activities by example (playing the game herself in the child's presence) and respond to questions the child may have. She needs to avoid "demeaning behavior," that is, behavior that belittles; for example: Teacher: (to the class), "It seems that some of us haven't had a good enough upbringing to control ourselves." Similar skills are required of teacher assistants.

Are training programs available for professionals and paraprofessionals?

At the time of this writing, the developers provide inservice training for the preschool and primary programs on a contractual basis with local communities. The training centers around the use of a Program Advisor, appointed by the community, who is responsible for the training of 10 teachers and 10 assistants. The Program Advisor attends a two-week seminar in the summer and three one-week seminars during the school year to learn about the program and procedures for training teachers and assistants. During the school year, the Program Advisor makes frequent classroom visits to demonstrate classroom procedures, makes systematic observations, gives feedback to teachers, and conducts workshops and seminars for teachers and assistants based upon the materials supplied by the developers, and classroom observations. When videotape recorders are available, the Program Advisor provides critiques of learning episodes videotaped by the teachers and assistants.

The developers also provide some on-site training and support for Program Advisors and teachers.

In the Parent/Child Toy-Lending Library program, the developers provide a one-week training seminar for teacher-librarians.

Aware that it may not be feasible for all interested communities to arrange for training on this basis, the developers are currently working on a plan to provide training for Program Advisors and teacher-librarians through linking agencies, including colleges and universities, and a network of regional consultants. Training

for the Toy Library was available as a course at San Francisco State College in the fall of 1971, and at the University of California at Berkeley in the Winter quarter. It is hoped that similar arrangements will soon be made with other colleges.

What materials are available for professional and paraprofessional training?

The following materials are available:

A. Preschool program (Head Start, Day Care, and other programs for young children).

1. Descriptive brochure entitled "Discovering Children" (available from developers)

2. Filmstrip and cassette tape entitled "Responsive Program for Children and Their Parents"

3. Notebook entitled "Inservice Teacher Training in the Use of the Responsive Program"

4. "Handbook for Teacher Assistants in the Use of Specific Responsive Toys"

5. Eight filmstrips and cassettes demonstrating the use of the eight basic toys

6. Set of eight basic toys, including

    1. Sound cans
    2. Color Lotto
    3. Feely Bag and Shapes
    4. Stacking Squares
    5. Wooden Table Blocks
    6. Number Puzzle
    7. Bead-O-Graph (Color Blocks)
    8. Flannel Board and Shapes

7. Second series of eight toys, including

    1. Coordination Board
    2. Hundred Peg Board

3. Alpha Boards
4. Property Blocks
5. Inset Shapes Board
6. Matrix Game
7. Pattern Box
8. Spinner Board

8. "Parent Guide: Learning Games to Play with a Preschool Child (Second Series)"

9. *The New Nursery School* text and six accompanying Learning Activities Booklets.

Items 2 through 9 are available from General Learning Corporation, 250 James Street, Morristown, New Jersey, 07960. These items may be obtained in specific kits or packages. The Teacher Assistant Kit contains a Handbook for Teacher Assistants, a set of eight basic toys, and a set of eight accompnying filmstrips. A set of materials for teacher trainers (such as Program Advisors) includes copies of the filmstrips, the training notebook, the "Handbook for Teacher Assistants," the eight basic toys, and *The New Nursery School.*

To Program Advisors and teachers participating in the inservice training, the developers supply additional unpublished papers and materials.

B. Primary School Program (Follow Through).

Training materials for primary school programs are not yet commercially available. The following materials are used for training during the test phase of the development of the primary school program.

1. Descriptive brochure entitled "Schools are for Children" (available from developers)

2. Slide set and audiotape entitled "The Responsive Kindergarten Primary Program"

3. "Guide for Learning Booth Attendants" (available from developers)

4. A set of general papers describing such things as classroom procedures, planning, organizing the classroom, use of language with young children and how to make effective use of assistants and volunteers.

5. Sets of toys and games

C. Parent/Child Toy-Lending Library

1. Descriptive brochure entitled "Parents and Children Learning Together" (available from developers)
2. Slide set and cassette tape entitled "Overview of the Parent/Child Toy-Lending Library"
3. Film entitled "Learning and Growing and Learning"
4. "Librarian Manual for the Parent/Child Toy-Lending Library"
5. Parent Guide: How to Play Learning Games with a Preschool Child"
6. "Parent Guide: Learning Games to Play with a Preschool Child (Second Series)"
7. Eight filmstrips and cassettes demonstrating the use of the eight basic toys
8. Set of eight basic toys (see list above)
9. Second series of eight toys (see list above)

Items 4 through 9 are available from General Learning Corporation.

D. General

1. Slide set and cassette tape entitled "Education Beginning at Age Three"
2. Article entitled "Overview of the Program for Education Beginning at Age Three"

ADMINISTRATIVE REQUIREMENTS AND COST

What facilities and physical arrangements are needed or recommended?

To create an environment responsive to children, the classroom is divided into various centers, alcoves and activity areas. Activities that require a low noise level can be separated from noisy activities. Wall to wall carpeting (except in the art activity center) gives the classroom a more homelike atmosphere, helps to reduce the noise level, and provides a comfortable surface to play on. Ample storage space is a necessity for toys, games, and materials that are not bing used. Materials that are intended to be used should be rotated often to stimulate student interest. The developers recommend that attention should be given to orderliness and attractiveness.

The following activity areas are recommended: concept formation area, block area, manipulative toy area, reading area, dramatic play ("dress-up") area, art area, listening area, and outdoor play area. For first and second grades, the block and dramatic play areas would probably not be included; instead, activity areas for math and science would be included.

Facilities for the outdoor areas should include a fenced yard, with areas of shade and open sunlight and expanses of grass and pavement, if possible. Outdoor equipment need not be expensive.

What special equipment is needed or recommended?

The eight basic toys are recommended for the preschool program. The typing booth (described above in the Content and Materials section) is an optional piece of equipment for kindergarten and first grade. The typewriter and other materials for the typing can be acquired locally. The developers also provide lists of other suggested equipment, but most of it is common to classrooms or easily obtained locally, and no one piece of material is considered absolutely essential. For more details, see the Content and Materials section.

What professional and paraprofessional personnel are needed or recommended?

The developers suggest that the local community interested in either the preschool or primary school program select a Program Advisor to train and advise teachers and teacher assistants. (See the Professional and Paraprofessional Training section.) Each Program Advisor works with approximately 10 teachers and 10 assistants.

In the preschool program, a teacher and an assistant are required for each classroom of 15-20 children; in

the primary school program, a teacher and an assistant are required for each classroom of 20-30 children. The assistant may be a parent who has been trained in the use of the Responsive Program.

What does it cost to implement the program?

For the preschool programs, a set of materials for a Program Advisor to use with 10 classrooms costs approximately $415 (prices as of Sept., 1971). The materials, which may be obtained from General Learning Corporation, Morristown, New Jersey, include a set of eight basic toys, a set of filmstrips and cassette tapes describing the toys, a filmstrip and cassette describing the program, a copy of the teacher training notebook, copies for 10 teachers and most sections of the notebook, 11 copies of the Handbook for Teacher Assistants, and 11 copies of *The New Nursery School*. Materials for training teachers may also be obtained in smaller units, at lesser costs.

Additional kits for teacher assistants, including a set of eight basic toys, eight filmstrips, and a handbook, cost approximately $154 each. These materials may be used in Head Start, day care, or other programs for young children.

The typewriter and other materials for the typing booth for kindergarten and first grade cost approximately $300. Costs of other primary school materials have not yet been established.

The equipment needed to start a Toy Library costs approximately $160. The materials, which may be ordered from General Learning Corporation, include a set of eight basic toys, a set of filmstrips, five Parent Guides, and a Librarian Manual. Additional toys and Parent Guides (including the second series of toys and guides) may be ordered separately.

The developers recommend that the use of the above materials be accompanied by training.

The cost of training is additional. At the present time, the developers estimate that workshops for a teacher-trainer (Program Advisor) in the preschool program or a teacher-librarian in the Toy Library program may cost approximately $50-100 a day. The developers suggest 5 days of training for a teacher-librarian, and 24 days during a year for a Program Advisor. These estimates may be adjusted to community needs. For further information on training, see the section on Professional and Paraprofessional Training.

Are the curriculum materials available?

Curriculum materials are included in the materials listed above under Professional and Paraprofessional Training.

PROGRAM DEVELOPMENT AND EVALUATION

What is the research base for the program?

The Responsive Program is an eclectic model, incorporating research and theory from a number of sources. The initial stimulus for the work was the assumption that an educational program should emphasize the enhancement of healthy self-concept and language and cognitive development. Supporting research included the work of Hunt, Bloom and Fowler.

A number of other researchers and developers influenced the specific nature of the program of the New Nursery School when it was first founded in 1964. O. K. Moore's "autotelic responsive environment" approach provided the guidelines for general procedures of the program.

The Montessori philosophy that the teacher is an observer and respondent to children's needs has also influenced the program. The use of Montessori's approach is also reflected in the program's emphasis on the use of educational toys designed to accomplish specific ends. Another source of influence has been Martin Deutsch. From the work of Dr. Deutsch, the developers pinpointed specific needs of children which formed the basis of the present objectives: self-concept, language, perceptual acuity, concept formation, and problem-solving.

How was the program developed and tested?

The instructional training materials and procedures undergo a series of tests with sample users to ensure the effectiveness of the program and its components.

1. Designing prototypes, testing prototypes, and selecting the best approach.

2. Preliminary testing involves a tryout with a limited sample of users. The test calls for feasibility of the materials to meet their objectives, and investigation into areas of deficiency for material revision.

3. Performance testing represents a testing with a large sample of users under careful supervision of the program staff.

4. Operational testing deterines whether the materials are ready for operational use in the schools with minimal involvement from the developers.

At any stage of development, this testing cycle can and has been recycled if the desired results are not obtained.

The various components of the program are at different levels of development. See the History and Present Status section for further information.

What evaluation studies have been conducted?

A number of evaluation studies have been conducted to test the effectiveness of the Responsive Program.

I. The developers evaluated the preschool model at the end of every school year from 1964 to 1968 while the program was still operating at Greeley, Colorado under the name "The New Nursery School." The learning booth program was also evaluated in Greeley as part of the preschool program.

II. An independent research report on the New Nursery School was completed in the College of Education at the University of Northern Colorado.

III. A variety of evaluations of the preschool, primary school, and Toy Library programs has been conducted by the developers at the Far West Laboratory for Educational Research and Development.

IV. In some school districts, independent evaluations have been conducted by school districts or other individuals or agencies.

Below are listed evaluation studies on the various categories listed above. For details, the reports themselves should be consulted. (See lists of reports.)

At the time of this writing, a major portion of evaluation (by the developers and by independent groups) is still underway. Reports will become available as soon as they are completd.

I. Developers' evaluation of The New Nursery School

A. *Interim Report: Research on The New Nursery School*, by Glen Nimnicht, John Meier, and Oralie McAfie. Published by Colorado State College, Greeley, Colorado, 1967. Numerous evaluation studies were conducted by the developers in Greeley from 1964-1968. The most important are listed below. Others are described in the report.

1. A color identification test was used to measure perceptual acuity and language ability.

   In 1966-67, three- and four-year-old children from low-income homes who had not had previous school experience were able to name only two of the nine colors before, but they were able to name five or six after one year of nursery school. Children from middle-income families entered the program with the ability to identify and name five or six of the colors and their performance also appeared to improve with experience in the school. Children from low-income families who spent two years at The New Nursery School no longer showed a deficit in comparison with the other group.

2. The Metropolitan Reading Readiness Test was used as the indicator for language development.

   In 1966-67, The New Nursery School graduates scored in the 70th percentile, while a comparison group scored in the 35th percentile. However, in 1967-68, the comparison group scored in the 82nd percentile while The New Nursery School group scored in the 66th percentile. The developers explain the results by saying that the 1967-68 controls were exposed to a Head Start program before the test years, while the 1966-67 group was not.

3. The Preschool Inventory (PSI) developed by Bettye Caldwell is designed for three- to six-year-olds "to give a measure of achievement in areas regarded as necessary for success in school." The test is not considered to be culture free. The results on the PSI for school years 1966-1967 and 1967-1968 indicated low percentile scores in achievement (from 0-35), using middle class norms.

4. The learning booth was part of the preschool program from 1964 to 1967. Evaluation of students using the booth is based on their progress in moving through the phases of the program. (The phases are described in more detail in the Content and Materials section.)

   Phase 1 is free exploration, Phase 2 is "search and match," Phase 3 is "discrimination," Phase 4 is "typing words and stories," and Phase 5 is "classroom related activities."

Data from 1964-1967 showed that most three- and four-year-old children reached Phase 2 or 3. A small percentage reached Phase 4 or 5.

II. Independent evaluation of The New Nursery School.

A. *THE NEW NURSERY SCHOOL. Evaluating the Effectiveness of an Open, Responsive Environment in Achieving Selected Objectives of Early Childhood Education,"* was completed in June 1970 by the College of Education at the University of Northern Colorado.

1. The Wechsler Preschool and Primary Scale of Intelligence and the Stanford-Binet Scale of Intelligence.

New Nursery School children in the first year group who took the test measured a gain of 6.70 points; second year pupils gained 1.7 points. Comparison of The New Nursery School second year group of similar background without Head Start type experience revealed a difference in IQ scores on the WPPSI of 7.8 favoring The New Nursery School children.

2. The Preschool Inventory.

Both the first year and second year groups of New Nursery School children made significant gains in each category of the Preschool Inventory and the total. In contrast to the WPPSI, the second year group continued rapid gain on the ability and content measured by the PSI.

3. The Bellugi-Klima Test of Grammatical Comprehension.

The total gain for both first and second year New Nursery School groups on this instrument evaluating the child's comprehension of key grammatical, structural, and lexical elements of the language was statistically significant.

4. The Task Accomplishment Inventories.

Both New Nursery School groups made gains on every category of the Task Accomplishment Inventories, designed to measure knowledge of specific concepts emphasized at the school. In fifteen out of eighteen instances, the gains were statistically significant.

5. Cincinnati Autonomy Test Battery.

Only one subtest of this battery was used, the Dog and Bone Test to measure innovative behavior or inventiveness. The New Nursery School second year pupils scored higher than the first year, and considerably higher than their own performance the previous year. As with both the first year and second year groups, children from middle-income homes scored higher than The New Nursery School groups. However, The New Nursery School children scored higher than Head Start children given the same test in Louisville, Kentucky.

6. Discussion of Longitudinal Data.

To evaluate the performance of New Nursery School graduates in the school, followup data were collected on the children and on a comparison group with a cultural and sociological background similar to that of The New Nursery School group. These findings indicated no significant differences on the class standings of the experimental and comparison groups. Significant differences were found for the 1968-69 group on a measure of self-concpet, The Behavior Rating Form.

New Nursery School groups of graduates scored higher than their comparison groups in the Metropolitan Achievement Test.

The Stanford-Binet Scale of Intelligence, administered in January, 1970, to children then in third grade, showed The New Nursery School group scoring higher than the comparison group, with little change being shown in mean IQ from kindergarten to third grade. The Draw-A-Man Test administered at the same time also showed the experimental group ranking higher than the comparison.

The WPPSI, given to New Nursery School graduates and a similar sample comparison group in fall 1969, showed New Nursery School pupils scoring higher on all measures of the WPPSI, with a difference on total IQ of 7.5.

7. Further details, including "Discussion of Correlational Analyses" and "Qualitative Observations," are contained in the report.

III. Evaluations of the Responsive Program, conducted by the developers.

A. Preschool (Head Start) Program.

1. "A Preliminary Report on an Experimental Training Program for Head Start Teachers and Assistants." March, 1969.

Classroom observations, interviews, and questionnaires obtained from teachers during and after the training period were used to evaluate materials provided during training. The way the training was conducted, and changes in behavior on the part of the teachers. The developers concluded that the materials were generally useful but needed revision; the volume of material needed to be reduced or spread over two years or both. The approaches used in training appeared to be effective. Significant changes in behavior appeared to have occurred on the part of teachers, although they were not as great as had been expected.

2. "Preliminary Analysis of 1968-69 Head Start Data: Occasional Research Report Number 3." July, 1970.

In eight Head Start sites, teachers were observed, the Preschool Inventory was administered to children, physical facilities were rated, and administrative support was measured. Summary of findings:

a. The majority of teachers in the Responsive Program during the 1968-69 school year increased their teaching skills and their behavior became more consistent with the teaching criteria defined by the Responsive Program.

b. Head Start children in the Responsive Program during 1968-69 also increased their proficiency. Average scores on the PSI for all eight communities demonstrated growth throughout the year. When year-end test scores were compared with national norms, Responsive Program children scored at norm levels reported for middle-class children.

c. Teaching performance is related to child achievement. When measured by PSI changes child growth was greatest for those in classes with teachers who demonstrated a high level of teaching ability.

d. Administrative difficulties and the adequacy of physical facilities play an important part in teacher performance and child development. Changes in child test performance and in teachers' teaching performance were greatest in classrooms with adequate physical facilities and in situations divorced from administrative problems.

3. "Responsive Model Head Start Teacher and Teaching Assistant Survey 1969-70." October, 1970.

Head Start teachers and teacher assistants in six states were surveyed by questionnaire at the end of the 1969-70 school year. The purpose of the survey was to obtain suggestions for improvement as well as to evaluate the program. Teachers' and teacher assistants' responses on their implementation of and reactions to the program were favorable.

4. "Survey of Responsive Model Head Start Program Advisors: Year End Report 1969-70." April, 1971.

Head Start Program Advisors in six states were surveyed by questionnaire. The purpose was to obtain suggestions for improvement as well as to evaluate the program. Program Advisors' responses were favorable.

5. "An Experimental Program for Head Start Teachers and Assistants: A Report on the End of the Third Year of Continuing Project." January, 1971.

This report discusses the developers' evaluations of the preschool program between 1967-1970, including the evaluations listed separately above. The evaluations are summarized as follows:

a. 1967-68

Major objectives:

(1) Test the materials that are being developed.

(2) Compare effective on-site inservice training with an eight-week campus program.

Results (see Report #1 above):

(1) Materials were generally useful but needed revising.

(2) On the basis of very limited evidence, the inservice program seemed to be as effective as the college-based training.

(3) The attitude of the administrator made a difference in the effectiveness of the training.

b. 1968-69

Major objectives:

(1) Compare the effectiveness of the program with the first year.

(2) Evaluate the effectiveness in relationship to the achievement of the children.

Results (see also Report #2 above):

(1) The program was more effective but two years of training are desirable.

(2) Administrative difficulties at the site and inadequate facilites had a negative effect on implementation of the program and on child achievement.

(3) Achievement of the children was high according to implementation of the Responsive Environment procedures by the teacher.

c. 1969-70

Major objectives:

(1) Develop better instruments to evaluate the achievement of children.

(2) Develop a better observation guide for observing classroom behavior.

(3) Program Advisors evaluate training process and materials.

Results:

(1) Developed instruments to measure child achievement.

(2) Developed and refined procedures for systematically observing.

(3) Child achievement on PSI, on Responsive Test for small sample, and on Colored Shape Tests for all classes increased favorably.

(4) Program Advisors evaluated training process and materials. (See Report #4 above.)

(5) Teachers' and teaching assistants' year-end survey responses on their implementation and reactions to the program were favorable. (See Report #3 above.)

(6) Identification of areas for improvement.

B. Primary School (Follow Through Program).

1. "Preliminary Analysis of 1969-70 Learning Booth Achievement: Occasional Research Report #1." November, 1969.

   Conclusions reached were: (1) Children demonstrated considerable learning booth achievement across communities, (2) learning booth achievement is related to the amount of time a child spends in the booth, and (3) children demonstrated higher achievement in those districts where the booths were in operation longer. For statistics, see the description below of Occasional Research Report #1a.

2. "Analysis of 1969-70 Learning Booth Achievement--Responsive Model Follow Through Program: Occasional Research Report Number 1a." August, 1970.

   The report discussed 1969-70 learning booth achievement and compared it to 1968-69 achievement.

Findings:

During 1969-70 in kindergarten, 14% of the children reached Phase V, 37% had reached Phase IV, 59% had reached Phase III, Steps 3 or 4, 87% had reached Phase III, Steps 1 or 2, and 97% had reached Phase II. In the first grades, 45% of the children reached Phase V, 58% had reached Phase IV, 75% had reached Phase III, Steps 3 or 4, 89% had reached Phase III, Steps 1 or 2 and 96% had reached Phase II.

When the Learning Booth achievement for the 1969-70 school year was compared to the previous year, improvement of the children's achievement was apparent. The comparative figures for kindergarten in 1968-69 were: Phase V, 31%; Phase IV, 44%; Phase III, 68%; and Phase II, 92%. Figures for first grades in 1968-69 were: Phase V, 50%; Phase IV, 63%; Phase III, 91% and Phase II, 97%.

3. "Preliminary Analysis of Kindergarten and First Grade Follow Through Test Results for 1968-69: Occasional Research Report Number 2." February, 1970.

The test results reflected a positive change in intellectual abilities for a majority of children in the Responsive Program.

Kindergarten findings: On the WPPSI subtests, low-income children increased from a pre-course average of 34 to a post-course score of 40. National norms indicate that 40 is an average score. Middle-income kindergarten children increased approximately 14 percentile points for 296 low-income children and 50 percentile points for the 138 middle-income children. Results on the Innovative Behavior and Categories test showed that these instruments were statistically unreliable.

First grade findings: At the first grade level, the average Metropolitan score on the pre-course administration was 40 out of 102. A score of 40 is equivalent to the 23rd percentile calculated on the standardization sample. Post-course scores increased 28 points to 68 which fell at the 77th percentile on norms calculated at the beginning of the first grade.

4. "The Implementation of the Responsive Model Follow Through Program . . . the Case of Community A (1969-70)." April, 1971.

This report attempts to pull together data collected on one Responsive Model Follow Through site during 1969-70. Data Sources are the Far West Laboratory, the school district, and the Stanford Research Institute.

The report summarizes findings on the composition of the classrooms; test data; data on the learning booth; the teacher and teacher assistant performance data; Stanford Research Institute data; and parent-collected data. Findings were favorable and were consistent across data sources.

C. The Parent/Child Toy-Lending Library.

1. "An Assessment of Cognitive Growth in Children Who Have Participated in the Toy Lending Component of the Parent/Child Program: Occasional Research Report #4." June, 1970.

During the winter of 1969-70, children in two school districts were tested with the Responsive Test, designed by the developers to assess intellectual development in children who have participated in the Responsive Program.

Findings:

A split-half (odd-even) reliability coefficient of .98 was obtained for the Responsive Test on the pre-test results of 31 children.

A one-tailed t-test showed that for both groups, there were positive and significant ($p < .05$) differences on nine of the 13 subtests. In two of the four subtests on which significant differences were not obtained, (color and shape matching) pretest performance was at the maximum level; thus, improvement could not be measured.

On the remaining two subtests (letter recognition and sensory concepts), pretest performance was low and no improvement was demonstrated at the time of posttesting. None of the nine toys in the course were designed to provide practice in these two areas. The findings for both groups of children were virtually identical and led to the following conclusions:

a. The children learned a considerable amount over the ten weeks of involvement in the Parent/Child Course;

b. A large portion of what children did learn can be attributed to the Parent/Child Course itself.

2. "An Evaluation of Nine Toys and Accompanying Learning Episodes in the Responsive Model Parent/Child Component: Occasional Research Report Number 5." June, 1970.

The nine toys used in the Parent/Child course were evaluated to determine whether they were capable of holding the interest of participating children. A toy and accompanying episodes were considered satisfactory if 80 percent of the children were still interested in the activity at the end of the week or lost interest only because they had mastered the activity, and if the child played with the toy more than five times or had played with the toy at least once without being asked. Evaluation, based on interviews with parents, was conducted in a Preliminary Test at two sites in the fall of 1969 and in a Performance Test at two sites in the winter of 1969-70. The two sets of tests yielded virtually the same reuslts. Five toys were found satisfactory, three were retained but revised, and two were rejected.

3. "Parent/Child Toy-Lending Library: A Report on Evaluation." August, 1971.

This report summarizes evaluations of various aspects of the Parent/Child Toy-Lending Library program. It includes:

a. Evaluation of the Toys. (See report described under #2 above.)

b. Evaluation of the course. On the basis of a parent questionnaire, the developers concluded that the course is successful in obtaining two objectives:

(1) the parents feel more competent in helping their children learn some important skills and concepts;

(2) the parents have a better understanding of what their child is capable of learning and they feel the child can be successful.

The developers also believe that the course succeeded in accomplishing a third objective, helping parents feel that they can influence the decisions that affect the education of their children, but they do not have evidence that significant changes

took place.

c. The achievement of the child. (See the report described under #1 above.)

d. The training program and materials for the teacher-librarians. Interviews with teacher-librarians indicate that the teacher-librarians think they understand the materials, have learned what was important to know from the course, and can demonstrate an understanding of some of the content.

IV. Independently conducted evaluations of the Responsive Program.

1. Halasa, O. *1969-70 Evaluation of Cleveland Project Follow Through.* Division of Research and Development, Cleveland Public Schools, Cleveland, Ohio, 1970.

Kindergarten children in the Responsive Follow Through Program showed higher levels of academic performance than comparison groups. First grade Follow Through children reported a lower level of performance than control children; these findings reflected the maintenance of a higher level of performance of control children during 1968-69. Second grade Follow Through children were either above or comparable in level of academic performance when compared with control groups.

2. Hansen, R.A. *et al. Evaluation report regarding the Follow Through kindergarten program 1968-69 school year.* Office of Planning and Research Services, Fresno City Schools, Fresno, California 1969.

Presents WPPSI and Preschool Inventory findings with conclusion that observed differences were in favor of Follow Through. Other data on Categories Test, Innovative Test and attendance were not different between programs. A larger percentage of Follow Through children (48%) could write their name at the end of the year than could children in the regular classes (36%).

3. Barclay, A.G. *Progress report on Follow Through 1969-70 year.* Psychological Services Component, St. Louis Board of Education--Project Follow Through, 1970.

General conclusion: The Responsive Model Follow Through provides the necessary social and language support that facilitates children's performance when they get into the classroom and especially those coming from Head Start programs.

4. Anderman, S.J., *et al. A comparative study of WPPSI and WISC performance of disadvantaged children.* Unpublished paper presented at annual convention of Southwest Psychological Association, St. Louis University, April, 1970.

   No significant differences were found between WPPSI and WISC IQ's in the preschool group. But the degree of cultural bias exhibited may be operating for both instruments even though the WPPSI includes in its standardization a sample of black children.

5. Russo, U. *Teacher-Parent congruence and child performance.* Salt Lake City School District, Salt Lake City, Utah, Fall, 1970.

   Tha author reported that his hypotheses about the scholastic behavior of Follow Through pupils and the attitude change of parents and teachers were not adequately tested because the instrument developed--the Responsive Environment Attitude Scale--was not able to demonstrate a high degree of construct validity.

6. Duluth School District, *Report of the Head Start & Follow Through parent program -- 1969-70.* Survey compiled and documented in March, 1970.

   Survey reviewed the 1969-70 Duluth parent program activities. Authors found that parents attended school activities a considerable number of times, and concluded that "significant changes" in the lives of some families occured "through active participation in the Head Start and Follow Through Program."

7. Stivers, J.A. & Hartwig, K.E. *A report on the 1969-70 program for preschool children and their parents.* Sacramento City Unified School District, Evaluation and Quality Control Department, June 1970.

   Preschool Inventory pre- and posttesting was done in four Responsive Program classes and 15 preschool classes that were not in the program but used the teaching strategies of the program. Parents were surveyed by a questionnaire, on which response was favorable. The authors also concluded that "the strategies employed in the Responsive Environment classes appear to have benefited pupils in those classes and in the regular classes as well."

PROGRAM HISTORY AND PRESENT STATUS

What is the history of the program?

The program was initiated at Colorado State College in Greeley, Colorado in 1964. It was called The New Nursery School. Dr. Glen Nimnicht founded the school with the assistance of Mrs. Oralie McAfee and Dr. John Meier. The New Nursery School, which was tuition free, was founded to meet the needs of children from low-income and ethnically different backgrounds. Shortly after The New Nursery School was established, a second school, The Responsive Environment Nursery, was founded in Greeley by Drs. Nimnicht and Meier for children of middle-class parents. The school has allowed the developers to test and demonstrate the effectiveness of their model for preschool education with both groups of children.

In 1967, Dr. Nimnicht started the Responsive Environment Model at the Far West Laboratory for Educational Research and Development in Berkeley, California. The model is based on the work of The New Nursery School. The Far West Laboratory began by developing a model for preschool education (ages 3-4). During the following year (1968), a primary school (Follow Through) model was initiated beginning with kindergarten. In 1969, a parent involvement component was initiated.

The New Nursery School, headed by Oralie McAfee, is still in operation in Greeley. It is now under the direction of Dr. Edward J. Kelly, Dean of the School of Education, Colorado State College, Greeley, Colorado.

What is the present state of development?

In establishing the Responsive Program for children from ages three to nine, the developers have identified five components. Some of these components have undergone several stages of development while others are still in the planning stage. The components are as follows:

A. A preschool (Head Start) program for three and four year old children.

B. A primary school (Follow Through) program for children from five to nine,

C. A Parent/Child Toy-Lending Library program for parents of children from three to nine,

D. A model day care program for children from three to nine,

E. A "systems development" component to combine the first four components into a total system of education for children from three to nine.

The present status of development for these components is discussed below.

Component A: Preschool (Head Start)

The preschool program has now been released for preliminary dissemination (subject to final revision).

Component B: Primary School (Follow Through)

Initiated in June, 1968, the instructional program and inservice training program for teachers and assistants are being developed and tested simultaneously. During the 1968-1969 school year, the development started with kindergarten. The first grade phase was initiated during 1969-70, the second grade in 1970-71, and the third grade in 1971-72. The program is now undergoing its major field test.

Component C: The Parent/Child Toy-Lending Library

The component was initiated in January, 1969. A program for three- and four-year-old children and their parents has now been released for general use. Additional materials for five- and six-year-old children are now being tested and will be released in June, 1972.

Component D: The Day Care Program

The developers have contracted with the U.S. Office of Education to operate a National Demonstration Day Care Center at the Office of Education in Washington, D.C. The center, which opened in June, 1971, uses the procedures and materials of the Responsive Program. In addition, the developers are now preparing proposals for the training of teachers in both federally funded and proprietary day care centers.

Component E: Systems Development

As indicated above, two components of the system have now been released. The total system will be available in 1975.

SELECTED REFERENCES

Anderson, A. R. and Moore, O. K. Autotelic folk-models. *Sociological quarterly, 1.* 1960, 203-216.

Nimnicht, G., Meier, J. and McAfee. An autotelic responsive environment nursery school for deprived children. In J. Hellmuth, (Ed.) *The disadvantaged child, Volume II.* Seattle: Special Child Publications, 1967.

Nimnicht, G., Meier, J., and McAffee. Nursery school education today. *Colorado state college journal of research services, 6.* 1967, 33-39.

Nimnicht, G. Low-cost typewriter approach helps preschoolers type words and stories. *Nation's schools, 80.* 1967, 34-37.

Nimnicht, G., McAfee, O., and Meier, J. *The new nursery school.* New York: General Learning Corporation, 1967.